1: Burrows--52 (1947-48) Woleaians
116, 501 Ifalik

"Ifalik is said to be better supplied with canoes than any of the neighboring islands. The total number on the island in January, 1948, (not counting hulks considered no longer seaworthy), was 91, or one for every 2.7 persons in the population; surely a remarkable showing for a place that has so little large timber. Three sizes are recognized: large sailing canoes with platforms (wā verugIt, 'big canoe'); canoes of medium size with several thwarts for paddlers (wa fatȍle, 'paddle canoe'), and canoes with only a single seat on the outrigger booms (rosemāni). Of the total of 91, 23 were sailing canoes, 21 medium-size paddling canoes, and 47 small rosemāni. * Sarfert recorded a different classification: wa li wuei, a large sailing canoe; manuwili, smaller sailing canoe for fishing; kafadule, paddling canoe for 4-5 men; djasemali (equivalent to rosemāni in his orthography), paddling canoe for 1 or 2; and fofat raft, a term I also collected."

"* The spelling of this word follows the attempt at phonemic orthography discussed in Appendix I. The commonest pronunciation is trojemān."

1: Burrows--52 (1947-48) Woleaians
116, 552, 501, 782 Ifalik

"Sailing canoes and large paddling canoes are given the names of tracts of land. Sarfert recorded an additional point, that these are the tracts on which grew the breadfruit tree that furnished the timber for the boat. Though I was not told this in detail, it fits what was told. The name of the sailing canoe built for Tom during our stay is Melegubwol, after a breadfruit grove just inland from the canoe-house where the vessel was built. Asked whether these names are supposed to have power to bring a canoe safe home from overseas, Tom said they are. Although he was sometimes over-eager to give an affirmative answer, this one is supported by a similar idea in a prayer, intoned to the god Soupalele when a canoe is casting off for an overseas voyage:

Lay the anchor in the woods!
Lay the anchor in the woods,
O Soupalele!
Put my anchor in a huge tree in the interior!
Right in the middle,
The very middle of the land.
When my canoe goes,
Let me return to this land!"

1: Burrows--52-53
116, 396, 501

(1947-48)

Woleaians 1-2
Ifalik

"In construction of hull and attachment of outrigger, canoes of all sizes are essentially alike. The small rosemāni have no thwarts except for the inboard portions of the two booms, while larger canoes have additional thwarts nearer each end. All canoes carry paddles (fatole) and wooden scoop-shaped bailers (mat). Paddling canoes are poled in shallow water. When not in use, the poles are laid over the booms just [53] outside the hull, and kept in place by sennit loops (taninga ni meinin) near each end. Wooden trays (tarong) rest on the booms just outside the hull, and are attached by lashing. They are used to carry small articles, which are more likely to stay dry there than inside the hull. In sailing canoes, these are replaced by large platforms (Fig. 7, d, e), not only on the outrigger side but on the lee side as well.

Large canoes conform in every respect but one--symmetry of the hull on Ifalik--to the 'flying proa' type described by Haddon and Hornell in 'Canoes of Oceania'* as characteristic of the western Carolines. Characteristics of that type which are present in Ifalik canoes are:

triangular outrigger platform

"* Throughout the following account, the terminology in English follows that of Haddon and Hornell."

lee platform on the side opposite the outrigger
forked heads at the top of both end-posts
two outrigger booms, curving downward
outrigger float attached to booms by crutch-shaped Y connectives and cord brace made up of multiple lashing. (A difference here is that in Ifalik the connectives are not pointed and driven into the float, but flat-ended, and carefully fitted to press against it. These connectives take only stresses that push the float toward the booms. Stresses that pull float and booms apart are taken by the cord brace.)

The characteristic of the 'flying proa' elsewhere which is not shared by Ifalik canoes is asymmetry of the hull. In the classic 'flying proa' type, Haddon and Hornell say, 'one side, the weather or outrigger side, is more rounding or fuller than the lee side.' As will appear in the account of drawing lines to guide the shaping of the hull, Ifalik hulls are carefully made symmetrical, longitudinally and transversely."

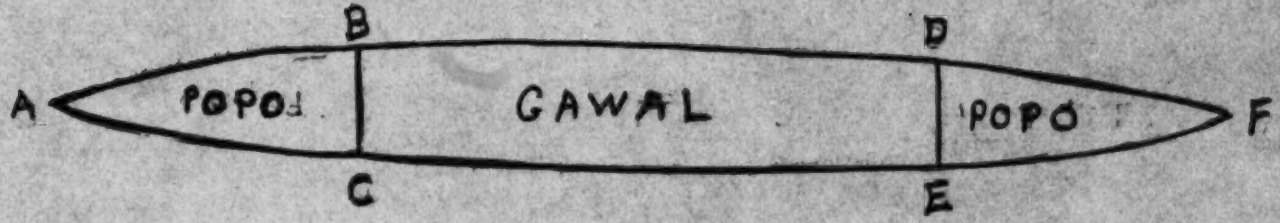
1: Burrows--55-A
116, 396, 501

(1947-48)

Wolenians
Ifalik

"Fig. 9. -Two types of forked head (metaliwā) for the ends of a canoe.

a, the type called kawalu, used on Ifalik.
b, the type called pōpō, attributed to Seimeligarâra."



"Fig. 10. -First measurements on the bottom of a canoe.

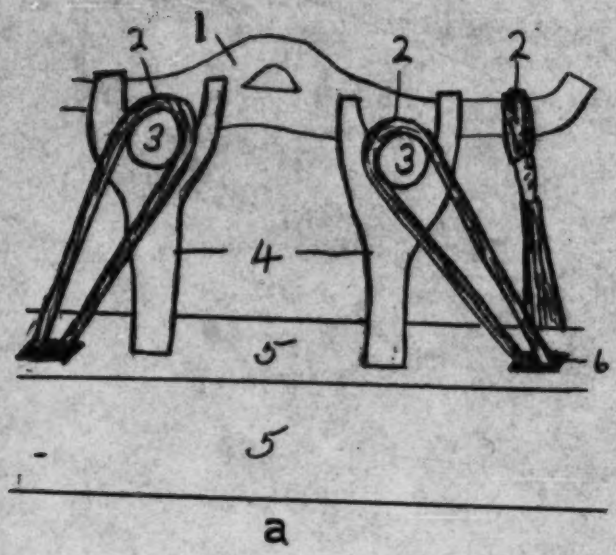
ABDF is the top of the log, which will be the bottom of the hull. It is called arol. BC and DE are the dividing lines between the end sections, called pōpō, and the middle section, called gawal. The gawal is one half the total length; each of the pōpō one quarter. The dividing points B and D are called annetok."

1: Burrows--60-A
116, 396, 501

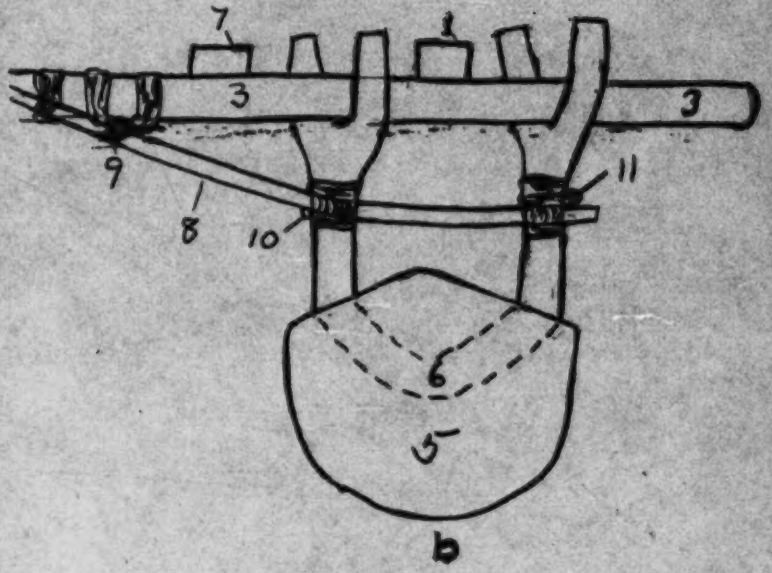
(1947-48)

Woleaians 1-2
Ifalik

"Fig. 11. -Outrigger attachment." See next page.



a



b

"Fig. 11. -Outrigger attachment.

For the sake of clearness, this diagram omits many details, such as the lashings that bind crutch connectives, yoke, and brace to the boom.

a, from outboard side. (Only the outboard pair of crutch connectives is shown.)

1, yoke (walieng); 2, lashing attaching yoke and booms to float;
3, booms (gio); 4, crutch connectives (amw); 5, float (tam);
6, holes in float through which lashings pass.

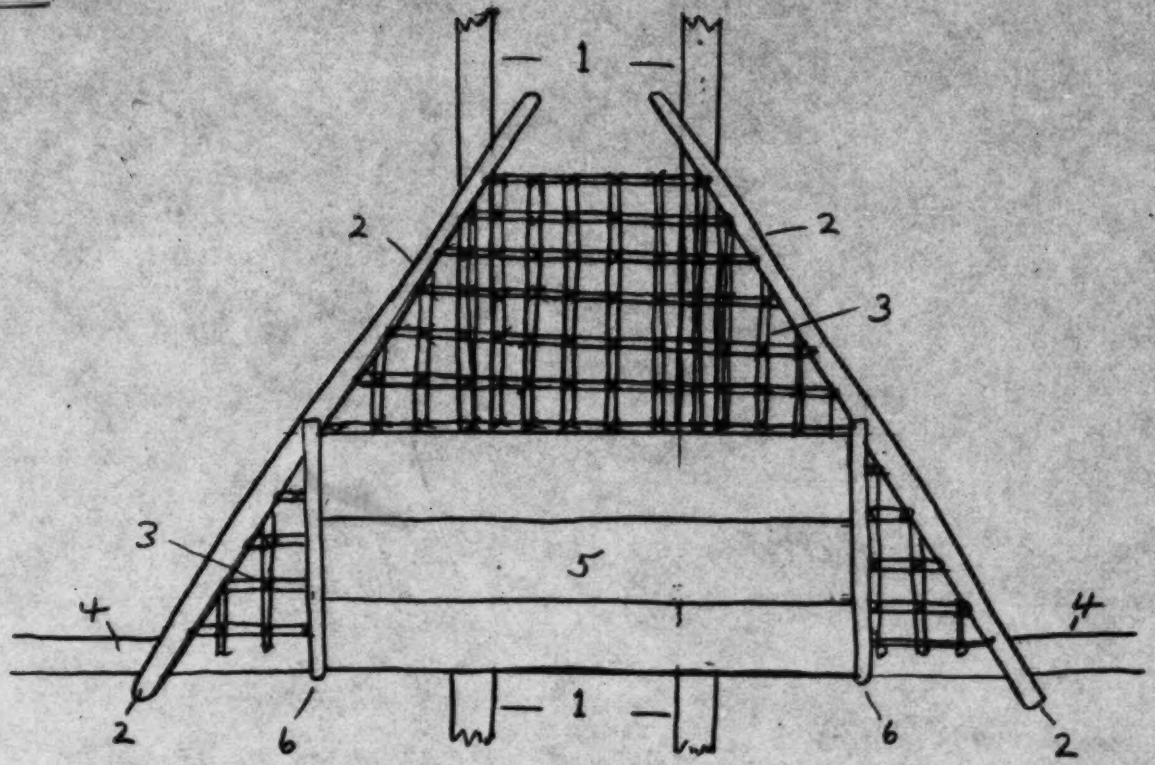
b, end view. (Only one boom, with the inboard and outboard connectives and strut attached to it, are shown.)

Numbers designate the same parts as in (a), with the following additions:
7, brace; 8, strut (rege); 9, light brace between booms;
10, light brace between inboard connectives; 11, light brace between outboard connectives."

1: Burrows--60-B
116, 396, 501

(1947-48)

Woleaians
Ifalik



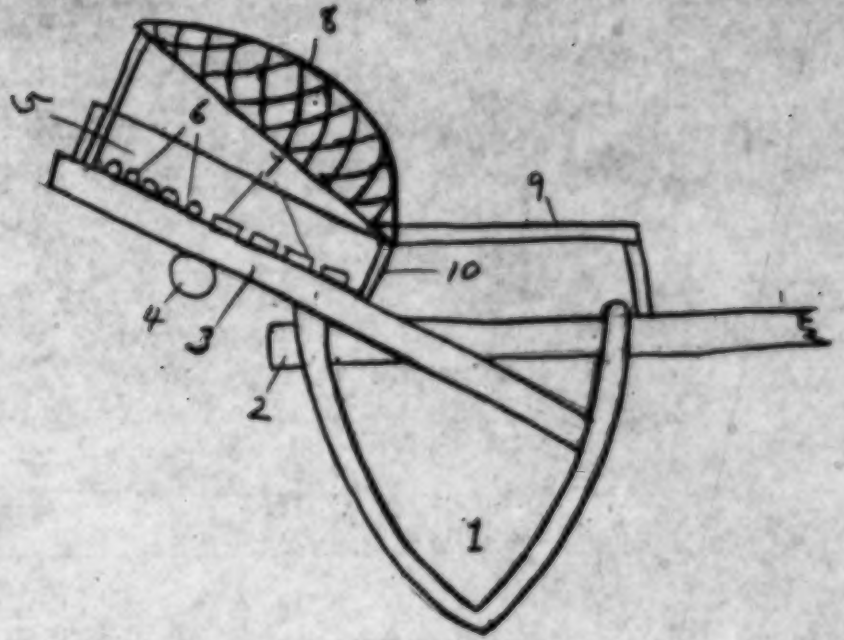
"Fig. 12. -Outrigger platform." See adjoining page.

1: Burrows--60-B (1947-48) Woleaians-2
116, 396, 501 Ifalik

"Fig. 12. -Outrigger platform.

1, booms; 2, diagonal spars (metare vang) between booms and gunwales;
3, withe platform (vang), spaced to show lower layer of transverse withes.
(Actually they are laid so close together that the lower layer does not show);
4, gunwales; 5, plank platform (peraf);
6, shaped upright planks (mwale maor) at forward and after ends of plank platform."

"Fig. 13. -Lee platform (pep)." See next page.



1: Burrows--60-C (1947-48) Woleaians-2
116, 396, 501 Ifalik

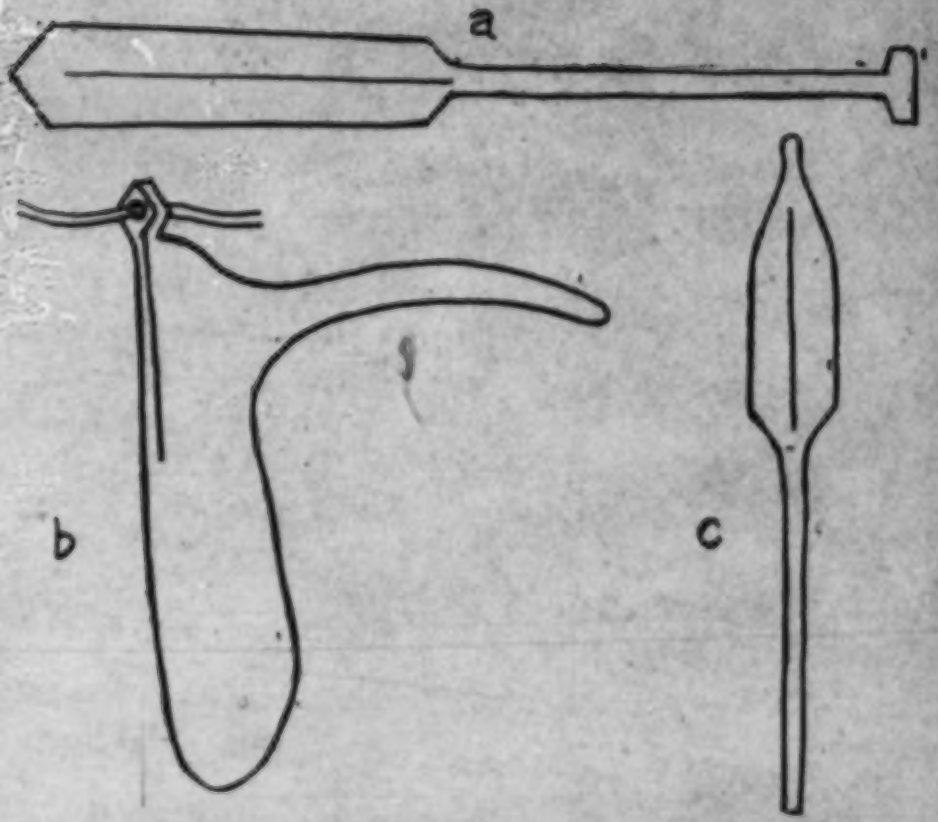
"Fig. 13. -Lee platform (pep).

1, hull; 2, boom; 3, supporting spar. There is one supporting spar at each end of the platform; only the nearer one is shown. Midway between them is a squared beam, not shown, which forms an additional support to the platform but does not extend across the hull. It is called outeni i pep.
4, longitudinal spar (walieng); 5, end frame piece (pal i pep; only the farther one is shown);
6, withes forming floor of outer part of platform (fang i li pep); 7, slats forming floor of inner part of platform (ujili i li pep); 8, pandanus-leaf roof or shelter over platform (gaimwemwe; this consists of whole pandanus leaves, overlapping, laid over a light frame of withes lashed together. A top layer of sennit netting prevents the leaves from being torn off by the wind); 9, transverse board (folak; there is one at each end of the platform; only the farther one is shown); 10, inboard frame place (weliwā)."

1: Burrows--63-A
116, 396, 501

(1947-48)

Woleaians
Ifalik



"Fig. 14. - a, steering paddle;
b, quarter rudder;
c, paddle."

"Fig. 15. -Traditional design for painting a canoe.

The colors are red, black, and white. Portions painted in red are shown by shading. The little panels of white, outlined with black, are called rajūm; the red portion (perhaps only the wide parts of it near bow and stern?), metegal; the black line through the middle of the red, fare; the narrow lower strip of red, lanīlap; the boundary between red and lower black, meteitralo; and the black under portion, amīs."

1: Burrows--107-108 (1947-48) Woleaians
116, 423, 501, 643 Ifalik 1-2

"Canoes have individual owners. The degree of exclusiveness in their use varies inversely with the size of the canoe. That is, the little rosemani are commonly used rather like private property by the owner and his family for [108] transportation and small-scale fishing. Members of other households do not take out these small canoes without permission. But a larger paddling canoe, still more a sailing canoe, is used most often for fishing by larger parties, usually a district undertaking. Since the owners are usually men of some age, while the fishing is done most often by the youths, the owner of a canoe often does not go out with it on a fishing trip. He has no special claim to the catches made in his canoe. If the chiefs ask his permission to have it taken out, this is more an assignment than a request. He would have difficulty in justifying a refusal, unless the canoe was unseaworthy. In that case it would be his duty to see that it was repaired.

Canoes for sea-burial are similarly assigned. Tom seemed proud to have his new canoe used for the burial of the chief Paliuilimar, who died soon after it was completed. It was kept in the canoe-house nearest the chief's residence; but was not the only sailing canoe there. The reason Tom gave for using it was 'because it is the biggest.' Both the dead chief and the owner of the canoe were honored. An owner would not undertake an interisland voyage in his canoe without permission of the chiefs, and would take passengers without expecting payment. In sum, the owner of a large canoe, as of a

canoe-house and most other property, is in effect more a custodian than an owner as we think of ownership. Large canoes, like canoe-houses, come very near being public property."

There must have been a great many boats in olden times, because Lütke declares that he was greeted by twenty-five, with around a hundred men in the crews. The Ifaluk canoes are similar to the ones of Polowat and the other Central Carolines in that they are made of boards (uá) of bread-fruit wood, and beside the out-rigger they also have the familiar fork-tail crest. There were various kinds of canoes :

a) wāliwuéī: a large sailing boat for long trips. They had their own names, and, as a matter of fact, they were named for the place where the breadfruit tree stood, the one that was used in the construction of the boat. The canoes were divided among the various clans as follows: [50]

The clan:	before the typhoon had:	in 1909:
Lawuáú	8	3 (one boat went directly to Faraulip.)
Sawōlób	1	1
Ledjōurǫ́u	5	1
Gajudólin	3	0
Sāgo	4	0
Jiwán	6	3(Of these one was in Faraulip and one in Lamutrik.)

b) manuwĭli: a smaller sailing canoe, used for fishing.
c) kafadŭle: a paddling canoe, which will not hold more than 4-5 men.
d) djašemăli: paddling boat for 1-2 men.
e) fofăt: float.

The natives also had play boats of various sizes; small ones were called galăl, and larger ones ligĕli. Drawing 146 shows a type, that was unusual in Ifaluk. This kind, which is called gauat, has a crescent-shaped ornament; they are often seen on Satoan, and there was one of them on Ifaluk before the last typhoon (1907).

[AN: For terms for the various parts of the canoe see source pages 50-51] [52]

The cooking apparatus (felan[illegible]ligăb) for long trips consists of a four-cornered (50 cm. square) raised frame with slender little sticks, which serves as a grill. This contrivance (drawing 151) stands on legs over the belăf. A small coconut leaf mat (ilafe) is laid in this polygonal frame, and then sand is sprinkled on top. Fish are roasted here. When the natives are on the high seas coconuts are used for water vessels. The men catch rain water in a hat, which is turned upside down, and its tip sticks into a coconut flask.

2: Damm et al. --133-135 (1909) 1938 Woleaians
116, 501, 552 Aurupik

The canoe (uă) is a wooden boat of the typical Central Carolinian form. The various types have particular names; for example, Sarfert went in a maiwŏle to Uäu in the atoll. There is a very small number of them today; on the largest island there were three big sailing canoes, and seven small ones, on the second island there was one small craft. Lütke and his companion von Kittlitz noticed "many boats on the beach" formerly. [CS: Omission of the names for the various parts of the canoe, pages 134-135).

4: Krämer--122 (1909) 1937 Woleaians
116, 501, 505 Lamotrek

paliŭ, the captain of the canoe, sleeps on the sea in the barong, while his wife stays in the gaimoém. The paliŭ sleeps in the kimoém on the lee platform, but on the canoes of the western islands that is the place assigned to the women; for that reason there is a hole, ngatalie bĕp, in the floor for the relief of nature. Sexual intercourse is not allowed on board.

Provisions:

The captain has the provisions with him in the barong but the coconuts are stored in the bul room or basebas barong; they may not be touched.* The pallŭ always eats first and then the crew, rŏliva. No one asks for food; everyone waits until the captain eats and then the others are given their share. Food is always very limited. The boat carries mar which tastes very well with tak, Belone.

The Canoe, oa̅
(cf. photos 15 and 17) [VMM: see source]
Native terms of Kotzebue see his Entdeckungsreise... Vol. III, page 62.

canoe	oa
mast	gkeus
sail	ui
float	tham
stern part of canoe	muril, mol
steer	ekailioth
row	fathel
drift	sasol
turn	thou
tack	tattagul
run aground	eckail [260]

The canoes of Oleai were considered very good.

Besides the large sailing canoe there exists a smaller type (Born: wa mar), and lagoon boats with the same forked tail figure-heads (Born: rassim); only the outrigger and the lee platform are much simpler. On the weatherside, on the baraf plank, where the outrigger begins, there is an enclosure for receiving goods and provisions (Figure 27)

4: Krämer--259-260 (1909) 1937 Woleaians-2
116, 501 Woleai

[VMM: see source]. A fishing canoe is called máluvil (Born: small rowing canoe, tschosmal; the larger type which holds 10-20 men is called wa fetal). Women are good oarsmen.

Krämer mentions bilis, breadfruit sap used for caulking. After 25 years it had a hellish smell. According to Born, cement is made of breadfruit milk, lime, ashes of coconut shell and the juice of pandanus roots.

6: Senfft--55
116, 396, 501

(no date) 1905

Woleaians
Woleai
Lamotrek

Their canoes are made of the wood of the species of breadfruit tree which bears seed. The canoes may be as long as 10 meters from bow to stern; the keel curves downwards and the end pieces are forked. On one side of the hull there is an outrigger and a sturdy bar running parallel to it, on the other side there is a broad platform where members of the crew may rest and where the supplies are kept. This platform is provided with a roof as a protection against the rain and the sun. The sail is made of plaited pandanus leaves; it has the shape of a triangle two sides of which are framed. The corner of the sail formed by these two sides is inserted into a groove in the end piece. The fore and aft end pieces are constructed in the same way. All parts of the boat are sewn together with coconut strings and the cracks are calked with fibers and the resinous sap of a plant. They do not groove the planks used for the canoe; for that reason, and because of the fact that there is no cover for the hull of the canoe, it is always necessary to bail water. A sturdy paddle with a broad leaf is used for steering. The canoes used for shorter trips, within the lagoon or for fishing expeditions, are built according to the same pattern.

There are two basic types of canoes, which again have two subdivisions each, those used for sailing and those used for rowing. The generic term for canoe is w(u)a. The canoes for rowing are privately owned; of these, some are built for one or two persons, tschosmal, and some are larger, accomodating 11 or 12, wafetul. They are made of wood from breadfruit trees, and the separate pieces are lashed together with coconut yarn and glue. This glue is made of burned pulverized coral lime, ashes of coconut shells and the juice of fatsch roots. The two outrigger, tamur, poles are placed in the center of these canoes [182]; these are forked and are set into the outrigger and made fast with coconut ropes, golgol, tied in elaborate knots. In the small canoes, a board made of wood from the breadfruit tree is placed over the outrigger poles to be used for sitting. The large canoes have eight or nine narrow benches for the men who are rowing, and a rectangular wooden platform with a reenforced edge, faref, which is used to store equipment and supplies; it takes up half the length and the entire width of the canoes and is placed on the outrigger poles, toward the outrigger and outside of the canoe proper. The canoes are equipped with short paddles which are easy to handle, fatel; there are made of safang (Calophyllum) wood and are slightly curved at the points.

All of these canoes have an attractive, slender shape. They have forked end pieces like those of Jap, rassim. On Jap there are no canoes for rowing; they are very handy for the people of Oleai, however, who use them for short trips among the neighboring islands.

The natives here are experts in the construction of canoes for sailing. There are two types of these: wamar, small canoes used within the lagoon, and waluwe, the large canoes used for deep water fishing and for the large expeditions to Ruck. By European standards, these large canoes are also quite useful for shorter trips. There are wide benches with back rests, falak, in the center of the canoe; for protection from wind and rain on longer journeys, there are huts, geimeru, on the outrigger.

The natives use carefully finished blocks of wood for the tackle. They learned this device from merchant ships; on Jap it is still unknown.

12: Lutke--140 (1828) 1835 Woleaians
501 Woleai

We saw several canoes in front of nearly every house and there were a great many in process of construction.

28: Spiro--38 [4] (1947-48) 1949 Woleaians
116, 784, 396, 501 Ifalik

"Except for the taboo on the owner of the newly-constructed canoe to participate in repair jobs, I discovered only one other taboo in canoe-construction. When working on the keel, the men must fast until the afternoon."

28: Spiro--39 (1947-48) 1949 Woleaians
116, 396, 226, 501 Ifalik

"There is one ritual ceremony connected with the construction of a large canoe. After the canoe is painted, a fire is lit outside the canoe-house for four consecutive nights, the canoe remaining in the canoe-house for that time. Failure to light the fire, would result in the men being unable to catch fish from that canoe--the fish would simply not bite."

41: Bates & Abbott N-5 (1953) 1958
OR21 Woleai OR21
Ifaluk

qualms. He asked Tom if he could not arrange a crew to take his wa terach, sea-going canoe, and go along. Tom said he could, but that he would have to get permission from the chiefs.

When the decision was made to sail that Monday morning, Ted had high hopes that he could go along. He made it seem very simple. I didn't know whether to volunteer to go along or not; I don't know whether he would have taken me anyway, but I was scared at the prospect of having to make some decision. But the decision was taken away from us.

We heard Maroligar blowing on his conch shell down by the beach, to call the chiefs together. Shortly after, the three navigators from Satawal came to pay us a farewell call, along with Fagolier, Maroligar and Tom. Tom announced to Ted the chiefly decision:

"Those chief 'e say 'no'. Suppose too much wind. Suppose typhoon 'e come. That canoe 'e go roll, roll, roll. Bimeby fall down in salt water. You die.

"Suppose you want go 'nother island, 'e got steamer. 'E got that Navy boat. You take 'im."

I felt a great sense of relief. Ted took it nobly, though surely his last chance for this great anthropological scoop was going with those canoes. He couldn't question the chiefly decision: but he could at least use the incident to show that chiefly government on Ifaluk was operating, and that the chiefs felt secure enough to deny a request backed by the enormous prestige of an anthropologist representing the occupying American power.

Ted decided he would at least get as thorough a description of the embarkation as he could. He put a case of corned beef in the rowboat and we set out for Falalap, Bakal and a friend at the oars and Don and me armed to the teeth with cameras. We got there just in time to see the last of the three big canoes rolled down into the water, and to follow the provisioning and stowing of the baggage—mostly big wooden chests that looked as though they might be of Japanese manufacture. Finally the passengers started to embark. The few women and children among these crawled into little thatched huts built out over the water on each canoe, on the opposite side from the outriggers. It certainly looked like cramped quarters.

6: Müller--307 E-5 (1909-1910) 1917 OR22 Yap OR22
Wolgai OR21
Faraulep
Ulithi OR20
Mokemok

/Between pp. 176 and 177./

Plate 57

Y
CW
501
Y
501
Y
501
343

2.

4. Gĭpăr̆ĭ canoe. On the right a dilapidated clubhouse with tobacco planting. Village of Gatnäth.

1.

3. Raised high-sea canoe with the canoe shelter, viewed longitudinally. Village of Gătšăpăr.

1. Raised high-sea canoe with the canoe shelter, village of Gătšăpăr. 2. Cargo canoe, Jauăv, manned by Faraulip and Mogemog people, Tămil Harbor.